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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|-------------------------|---------------------|------------------|
| 10/737,384 | 12/16/2003 | Francisco Paul Maturana | 03AB042/044 | 5368 |

7590 06/23/2006

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EXAMINER

VON BUHR, MARIA N

ART UNIT PAPER NUMBER

2125

DATE MAILED: 06/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|-------------------------------|---------------------------------|--|
| Office Action Summary | Application No. 10/737,384 | Applicant(s) MATURANA ET AL. | |
| | Examiner M. N. Von Buhr | Art Unit 2125 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 Dec 2003, 17 Feb 2004 & 12 Apr 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) 25-28 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 21-24 is/are rejected.
- 7) ☒ Claim(s) 2-20 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>20050412</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-28 are pending in this application.
2. Applicant's claim for domestic priority under 35 U.S.C. §119(e) is acknowledged.
3. Examiner acknowledges receipt of Applicant's information disclosure statement, received 12 April 2005, with accompanying reference copies. This submission is in compliance with the provisions of 37 CFR §1.97. Accordingly, it has been taken into consideration for this Office action.
4. Examiner acknowledges receipt of Applicant's formal drawings. These drawings are acceptable.
5. Claims 26-28 are withdrawn from consideration, because the claim dependency is recursive and confusing. Appropriate correction is required in response to this Office action.
6. The non-statutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute), so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A non-statutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR §1.321(c) or §1.321(d) may be used to overcome an actual or provisional rejection based on a non-statutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR §3.73(b).

7. Claim 24 is provisionally rejected on the ground of non-statutory double patenting over claims 1-23 of co-pending U.S. Application Serial No. 11/107,031 since the claims, if allowed, would improperly extend the "right to exclude" already granted in the patent. This is a provisional double patenting rejection since the conflicting claims have not yet been patented.

The subject matter claimed in the instant application is fully disclosed in the referenced co-pending application and would be covered by any patent granted on that co-pending application since the referenced co-pending application and the instant application are claiming common subject matter, as follows: Claims 1-23 of U.S. Application Serial No. 11/107,031 contain every element of claim 24 of the instant application and as such anticipate claim 24 of the instant application.

Furthermore, there is no apparent reason why Applicant would be prevented from presenting claims corresponding to those of the instant application in the other co-pending application. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP §804.

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. §102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by Applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by Applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by Applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claims 1 and 21-24 are rejected under 35 U.S.C. §102(a) as being clearly anticipated by Ahuja et al. (U.S. Patent No. 6,411,603), which disclose "a communications arrangement where services requested by users are provided over a network, communication flow arising from the services are shared by multiple links in the network. The users are required to pay for use of the links to realize the respective services. A target operating point defining the desired amount of communication flow on each link is established. A pricing scheme in accordance with the invention is used to price each link on a per unit of flow basis. Each user elects use of the capacity of those relatively inexpensive links to fulfill the requested service to minimize the cost. Such optimization actions by the individual users give rise to a "routing

game" leading to a Nash equilibrium which coincides with the target operating point. Thus, with the inventive pricing scheme, the target operating point is attained over time by virtue of the users' cost optimization actions" (the abstract).

As per the claims, Ahuja et al. teach "a notion that each service utilizing the links incurs an economic cost to the user requesting the service. That is, the user needs to pay for use of the links for the requested service. In accordance with the invention, the network provider is able to attain a pre-selected target operating point by assessing an appropriate cost to each user for his/her service. The target operating point defines the desired amount of capacity of each link for use. The cost is assessed based on a price which is a function of such a desired capacity amount of each link for use, and the total capacity amount of each link being used. To minimize the cost, each user most likely elects use of the capacity of those relatively inexpensive links to realize a service. Thus, in accordance with the invention, the aforementioned price is dispensed in such a way that it provides users with an incentive to utilize the links in a certain manner, thereby inducing an equilibrium of shares of the required capacity among the links, which coincides with the target operating point" (col. 1, lines 46-64), wherein a "routing game" is provided for, in which "each user attempts to find a routing strategy which minimizes his/her cost. The optimization attempt of the user is affected by the routing strategies of other users. As a result, each user dynamically devises his/her routing strategy subject to the similar action by other users to minimize his/her cost. Such dynamic user actions can be modeled as a non-cooperative game which leads to the Nash equilibrium, from which no user finds it beneficial to deviate unilaterally. By design, the inventive pricing scheme described above causes the Nash equilibrium to coincide with the target operating point. Thus, using the pricing scheme, the target operating point is attained over time when the communication flows on links 1 through L settle" (col. 4, lines 47-60). See also, at least, col. 1, lines 8-11; col. 2, lines 14-29; col. 2, line 45 - col. 3, line 13; col. 4, lines 43-60; col. 5, line 46 - col. 6, line 4.

10. Claims 1 and 21-24 are rejected under 35 U.S.C. §102(b) as being clearly anticipated by Johnson et al. (U.S. Patent No. 5,995,602), which disclose "Telecommunication switches (e.g., PBX's or local exchange carrier's Centrex-enabled switches) route calls in accordance with economic incentives (e.g., least cost routing) resulting from a bidding process between participating telecommunication Carriers (Carriers) by operation of a central processor, a computer referred to as a bidding moderator (Moderator). Each of the Carriers bidding for traffic over a route informs the Moderator of the rate it is willing to charge for (or other economic incentive it is willing to offer) service between two specific points in a telecommunication network, for example, from one NPA-NXX to another NPA-NXX, at some particular

time. This "bid" rate may be lower than that Carrier's established rate for any of several reasons (e.g., the Carrier has excess capacity on that route at that time). The Carrier may change its bids as often as it likes during the day as traffic patterns change. The Moderator collects this bid information from all the Carriers, processes the bid information and transmits carrier selection information to subscribing switches. Bid information is also transmitted to participating Carriers' network management centers. From the list of all Carriers providing bid information to the Moderator, each Subscriber can select those Carriers to which it wants traffic routed and can change that selection at any time" (the abstract). See also, at least, col. 1, line 45 - col. 2, line 67; col. 3, lines 45-60; col. 8, lines 5-61; col. 9, lines 28-54; col. 10, line 59 - col. 11, line 7; col. 11, lines 25-39.

11. Claims 2-20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

12. The following is a statement of reasons for the indication of allowable subject matter:

None of the prior art of record, neither alone nor in combination, are deemed to fairly teach and/or suggest the instantly claimed "control system for a distribution network having a set of distribution endpoints including at least one producer and consumer interconnected by a set of distribution resources including: a plurality of distribution lines joining the producers and consumers and switchable gates interconnecting the distribution lines, producers, and consumers, the control system comprising: a set of autonomous control units associated with at least some of the distribution endpoints; a set of autonomous control units associated with at least some of the distribution resources; and the autonomous control units executing a stored program and communicating with each other to: (a) implement a set of money rules to allocate money resources to the consumers and a set of pricing rules for distribution resources; (b) bid for distribution resources on behalf of consumers based on the money rules and pricing rules; and (c) select distribution paths between producer and consumer endpoints using distribution resources based on bid responses," when such control system is implemented in an environment wherein "the distribution lines are pipes and the switchable gates are electrically operated valves," as instantly claimed.

13. The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure. Applicant is advised to carefully review the cited art, as evidence of the state of the art, in preparation for responding to this Office action.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to M. N. Von Buhr whose telephone number is 571-272-3755. The examiner can normally be reached on M-F (9am-5pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo Picard can be reached on 571-272-3749. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



M.N. Von Buhr
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Art Unit 2125